

FAST Act Section 1413 – Alternative Fuels Corridor Designations

GRANITE STATE CLEAN CITIES MEETING

JUNE 28, 2019

MIKE SCARPINO | U.S. DEPARTMENT OF TRANSPORTATION- VOLPE CENTER



National Alternative Fuel Corridors



To improve the mobility of alternative fuel vehicles, the U.S. Department of Transportation (DOT) has designated national corridors in strategic locations along major highways for:

- ▶ Plug-in electric vehicle charging
- ▶ Hydrogen fueling
- ▶ Propane (LPG) fueling
- ▶ Natural gas (CNG, LNG) fueling

Benefits of a National System

ALTERNATIVE FUELS CORRIDOR

- ▶ Allows for inter-city, regional, and national travel using clean-burning fuels
- ▶ Addresses range anxiety
- ▶ Integrates with existing transportation planning processes
- ▶ Accelerates public interest and awareness of alternative fuel availability

Corridor-Ready Criteria

EV	CNG	LNG	Hydrogen	Propane
DCFC only	150 miles between stations	200 miles between stations	100 miles between stations	150 miles between stations
50 miles between stations	5 miles from highway			5 miles from highway
5 miles from highway	Public stations only	5 miles from highway	5 miles from highway	Public stations only
Public stations only (no Tesla)	Fast fill, 3,600 psi	Public stations only	Public stations only	Primary stations only

Round 3/FY 2018 Request for Nominations

5

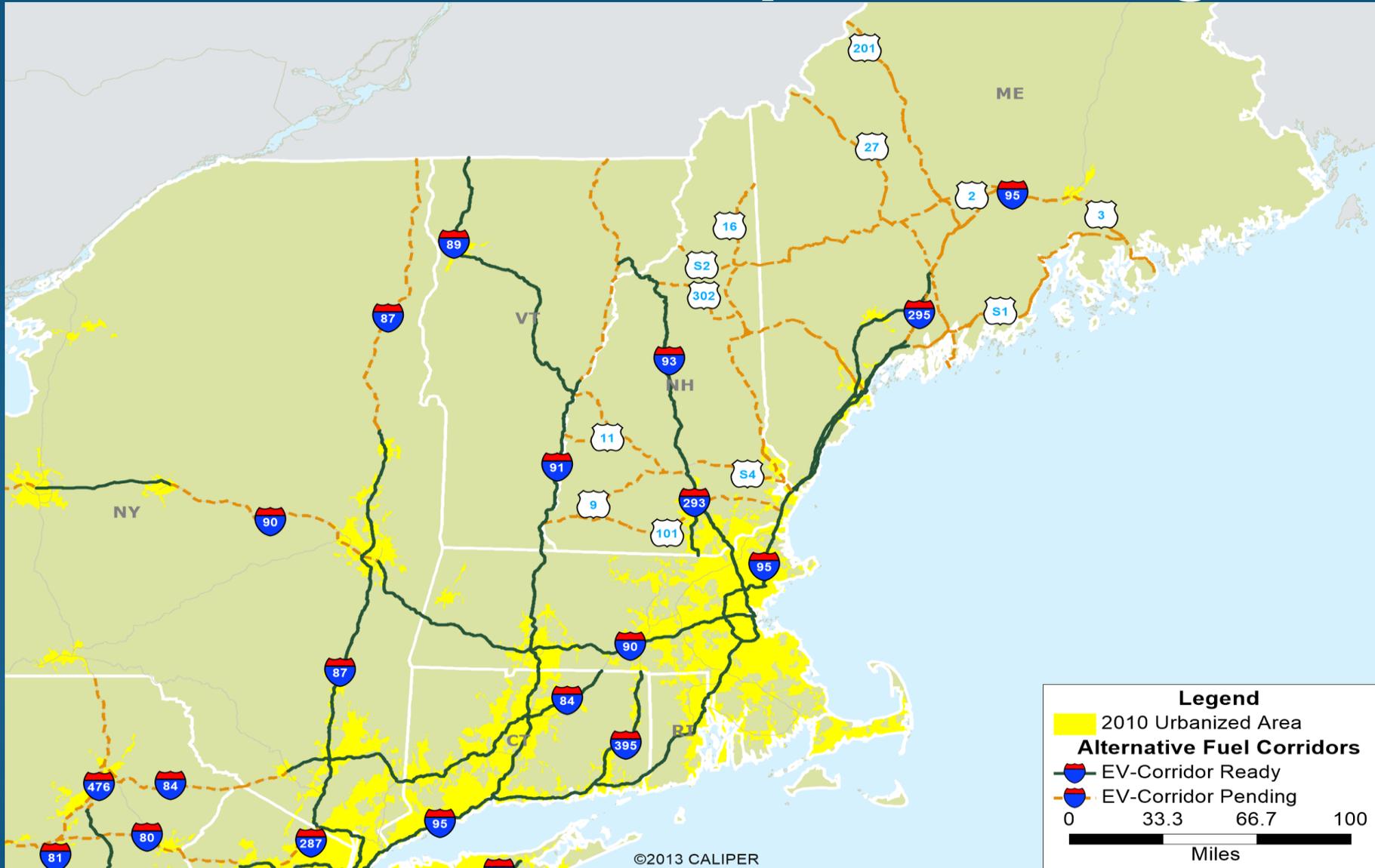
- ▶ Round 3 request for nominations - October 2018
- ▶ Distributed through FHWA Division Offices
- ▶ Nominations due the end of January 2019
- ▶ Designations announced in April 2019
 - ▶ 21 Nomination Proposals Received
 - ▶ 16 State DOTs, 3 Environmental Agencies, 1 SEO, 1 MPO
 - ▶ 48 Interstates & 40 US/State Highways
 - ▶ Across 24 States

Combined Results

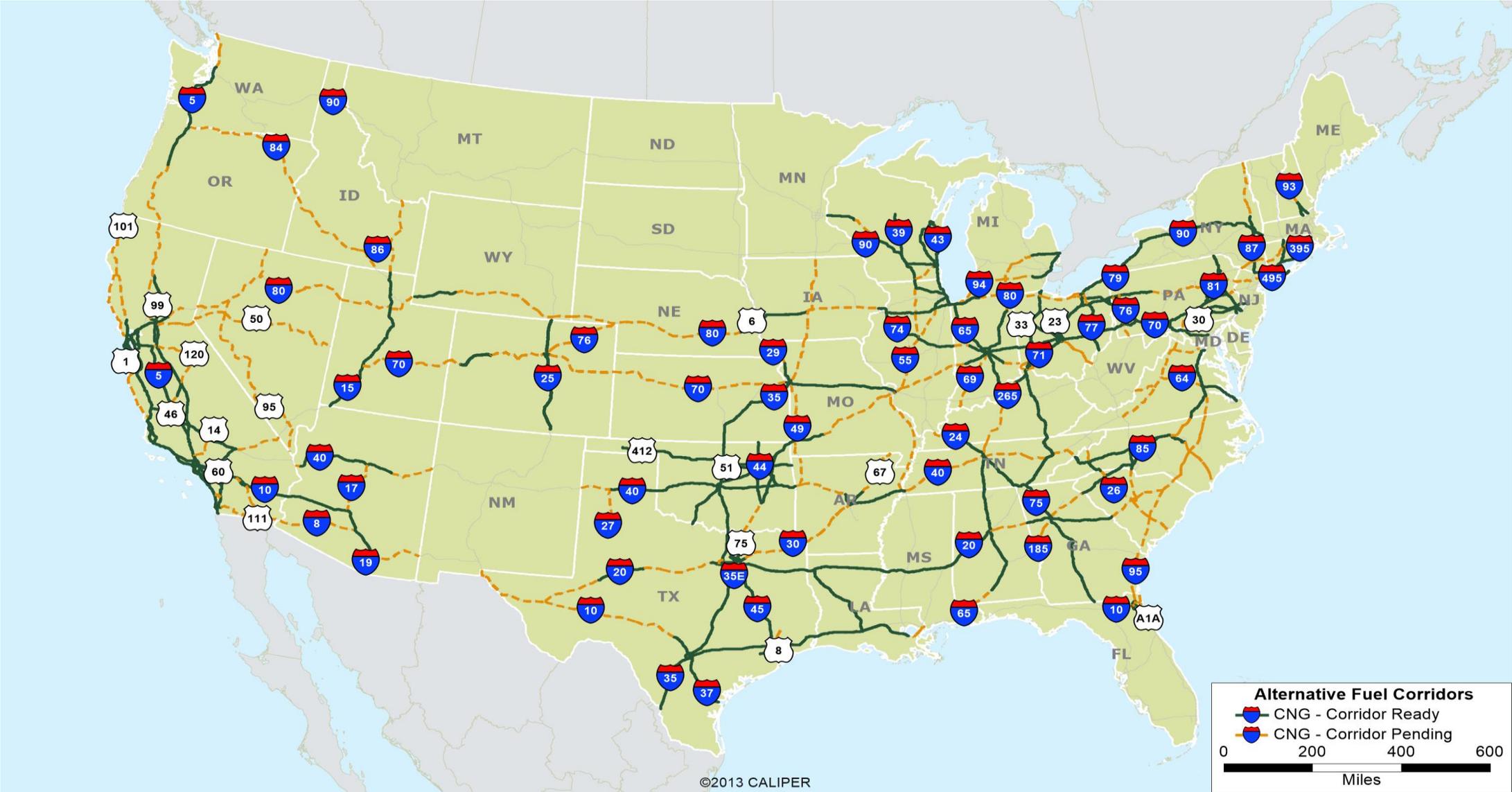
Rounds 1-3

- ▶ Designations....
 - ✓ **79** nominations
 - ✓ Includes portions/segments of **100** Interstates, along with **76** US highways/state roads
 - ✓ Comprise **46 states plus D.C.**
 - ✓ Covers **approximately 135,000** miles of the National Highway System (all fuels combined)

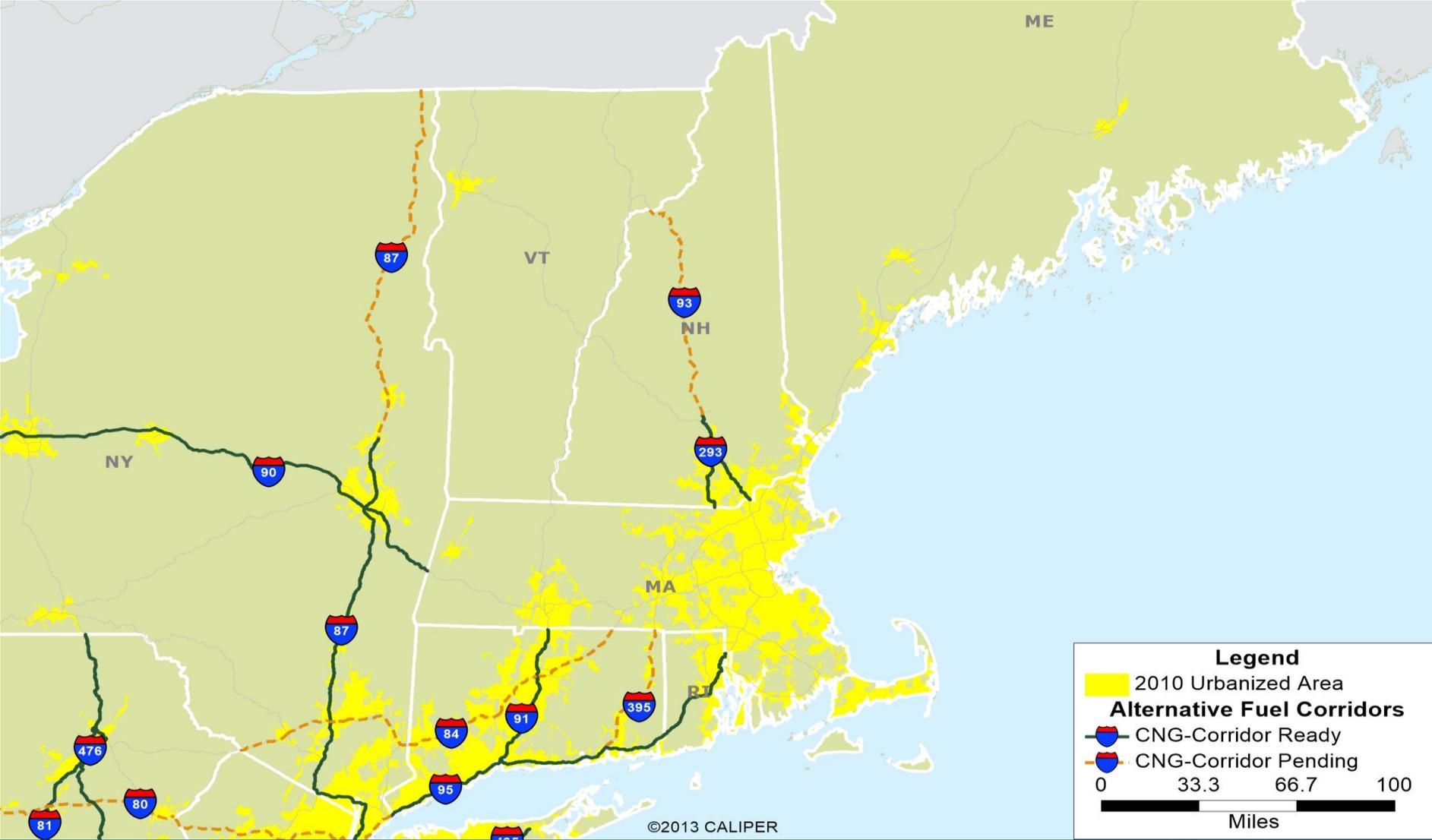
Rounds 1-3 EV Map – Corridor Ready & Pending



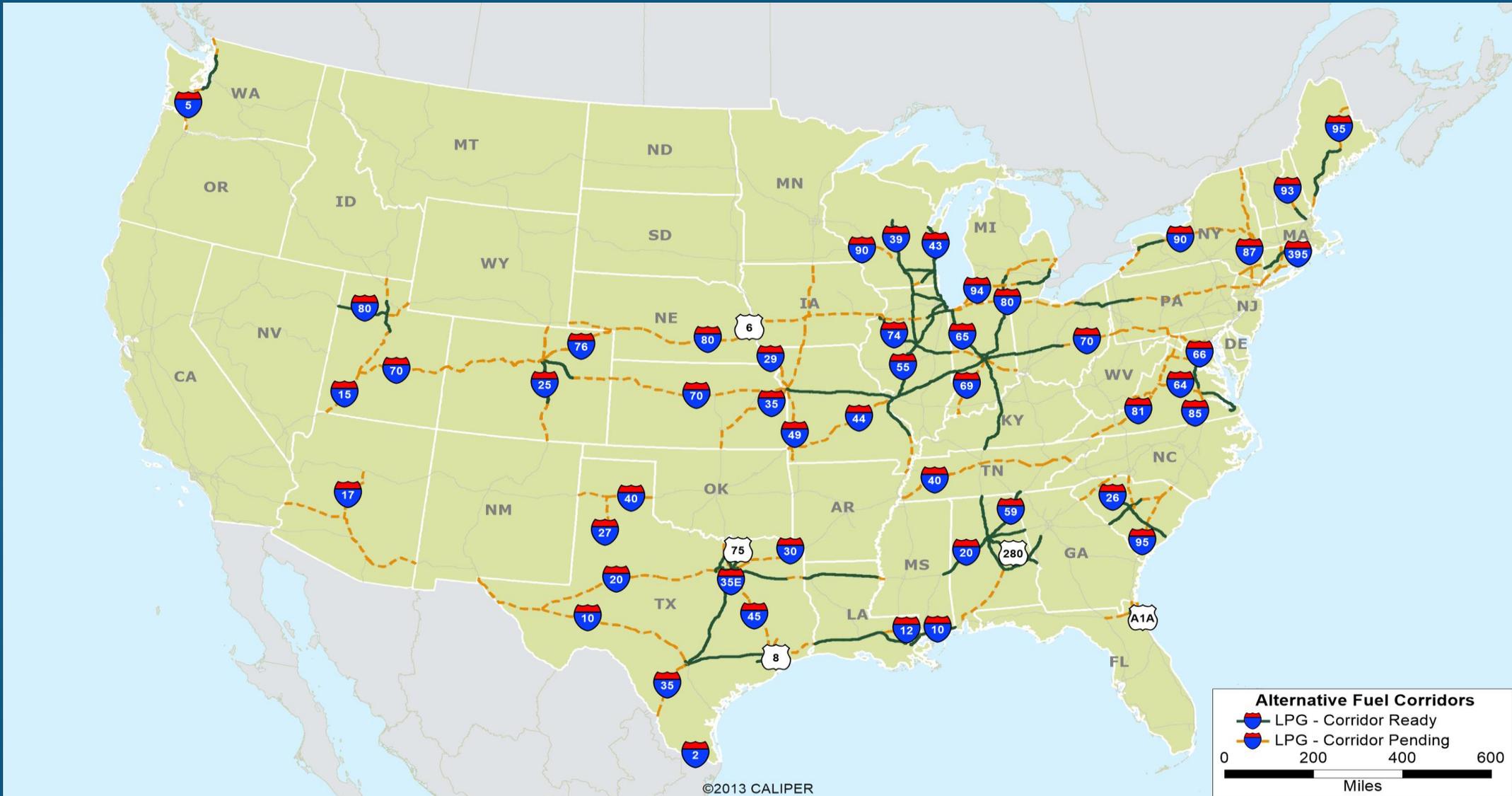
Rounds 1-3 CNG Map – Corridor Ready and Pending



Rounds 1-3 CNG Map – Corridor Ready and Pending

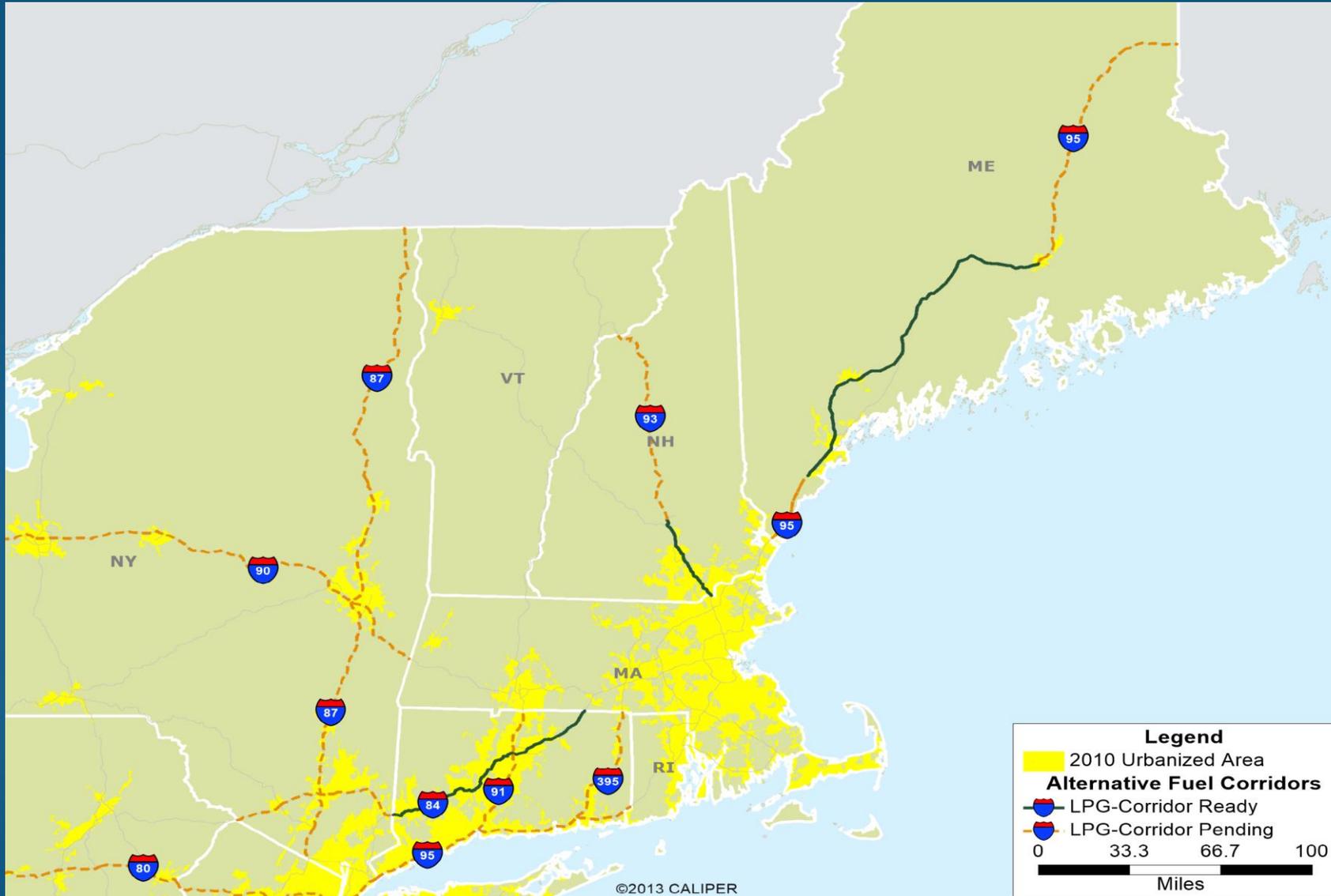


Rounds 1-3 LPG Map – Corridor Ready and Pending

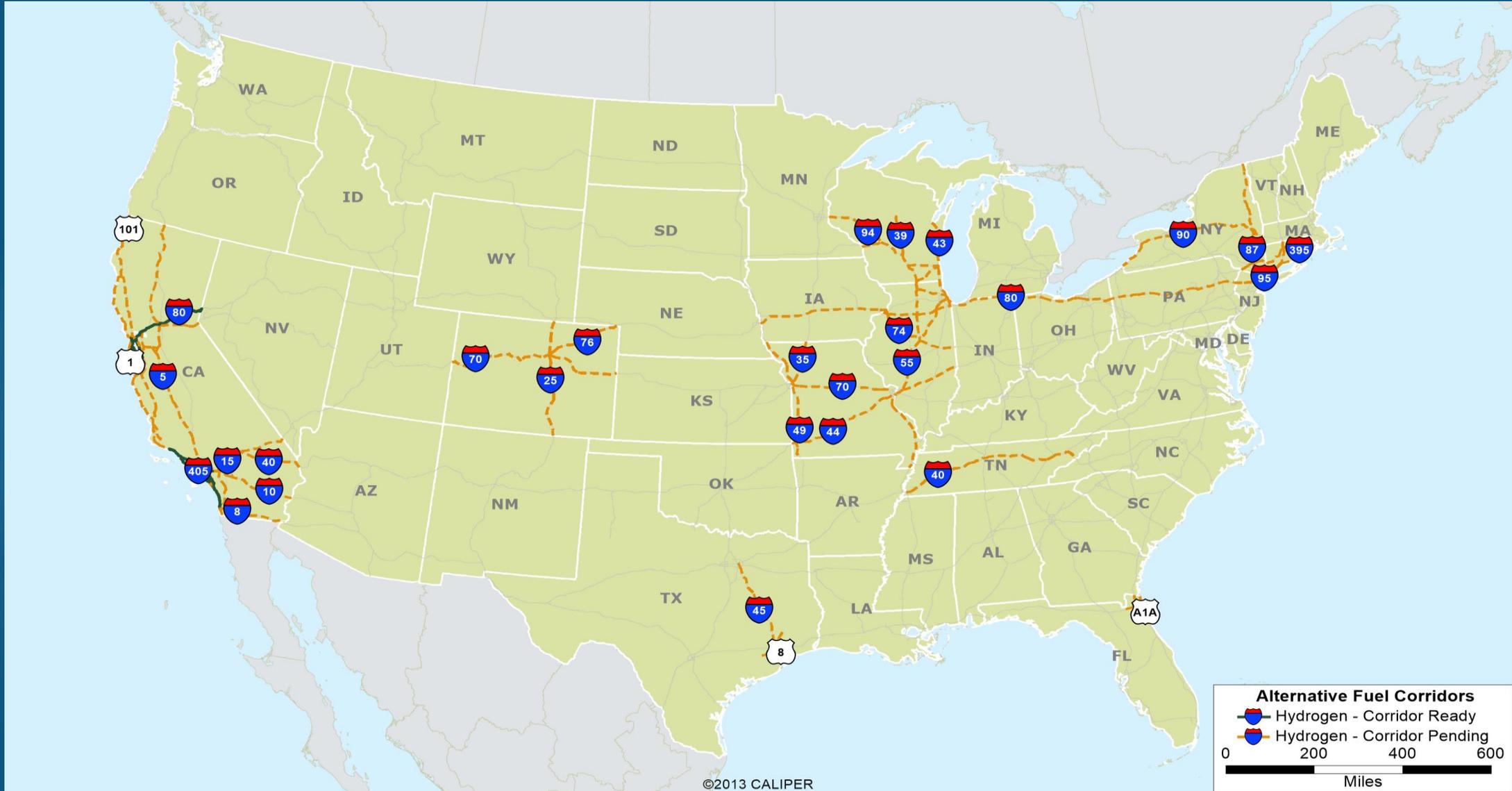


Rounds 1-3 LPG Map – Corridor Ready and Pending

12



Rounds 1-3 H2 Map – Corridor Ready and Pending



Highway Signage

15

- ▶ **MUTCD Memorandum – Signing for Designated Corridors**
 - ✓ Provides guidance to State DOTs
 - ✓ First corridor signs installed on I-94 and I-26
 - ✓ FHWA developed FAQs to address commonly asked questions (see AFC website)

I-94 (Minnesota)



Pictured from left, Louisiana Department of Natural Resources Secretary Tom Harris, Louisiana Department of Transportation and Development (DOTD) Secretary Shawn Wilson, Gov. John Bel Edwards and [#LDEQ](#) Secretary Chuck Carr Brown.



I-26 (South Carolina)

Partnering/Collaborations with Department of Energy

- ▶ Vehicle Technologies Office/Clean Cities:
 - ▶ Technical/Program support
 - ▶ Fund Clean Cities coalition support
 - ▶ MotorWeek
- ▶ National Renewable Energy Lab
 - ▶ Maintains database of fueling stations
 - ▶ Develop corridor specific tools & resources
- ▶ Fuel Cells Technologies Office
 - ▶ Coordinating station deployment/corridor efforts on West Coast and Northeast



Federal Highway Administration Regional Alternative Fuel Corridor Convenings

- ▶ Team to hold 5 regional convenings:
 - ▶ To Date: Midwest (MN), Southeast (SC), South-Central (TX)
 - ▶ *Next Up*: Northeast/Mid-Atlantic (RI), and REV West (Salt Lake City)
- ▶ Strengthen coordination b/w states, public and private partners
- ▶ Evaluate regional priorities & needs, programs, and resources to expand corridors
- ▶ Identify critical infrastructure gaps
- ▶ Discuss a regional strategy to promote clean vehicle adoption and corridor growth
- ▶ Foster partnership development

3 Regional Convenings Held to Date

Midwest AFC
St. Paul, MN
June 12, 2018



Southeast AFC
Charleston, SC
September 25, 2018

South-Central AFC
Arlington, TX
April 9, 2019



Future of AFC Program

19

- ▶ Request for Nominations on an annual basis under life of FAST Act
- ▶ Possible inclusion in the next transportation reauthorization bill or other legislation
- ▶ Enhanced coordination efforts with Clean Cities Program/NREL and other Federal/State agencies
- ▶ Enhanced collaboration with stakeholders including industry



For More Information

20

DOT Alternative Fuel Corridor Team Contact Information

Diane Turchetta

U.S. Department of Transportation
Federal Highway Administration
202-493-0158
diane.turchetta@dot.gov

Mike Scarpino

U.S. Department of Transportation
Volpe Center
617-494-3373
michael.scarpino@dot.gov

Stephen Costa

U.S. Department of Transportation
Volpe Center
617-494-3852
stephen.costa@dot.gov

Resources

FHWA Alternative Fuel Corridor website:

http://www.fhwa.dot.gov/environment/alternative_fuel_corridors/

MUTCD Memorandum – Signing for Designated Alternative Fuel Corridors:

https://mutcd.fhwa.dot.gov/resources/policy/alt_fuel_corridors/index.htm

DOE/NREL Alternative Fueling Station Locator & Corridor Tools:

<https://afdc.energy.gov/stations/>
<https://afdc.energy.gov/corridors>

Motorweek Video Segment on Corridors:

<https://www.youtube.com/watch?v=QZhLFqTXb-g>